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THE Wheat SITUATION

BUREAU OF AGRICULTURAL ECONOMICS
UNITED STATES DEPARTMENT OF AGRICULTURE

WS-45 BAE JULY 1940

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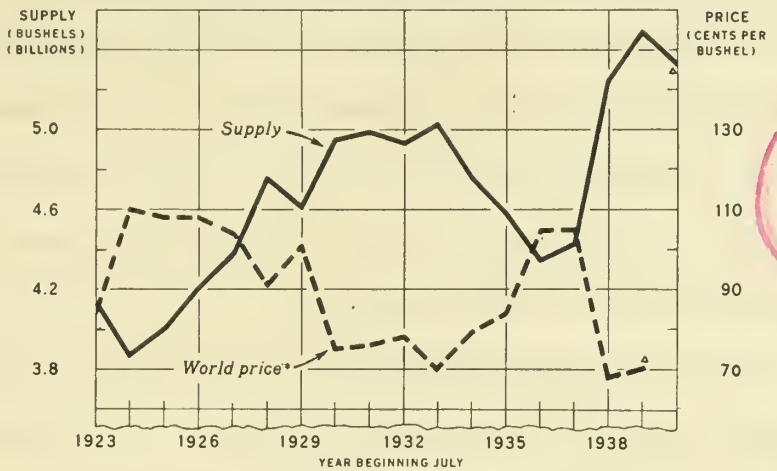
WHEAT: WORLD SUPPLY AND PRICE, 1923-40

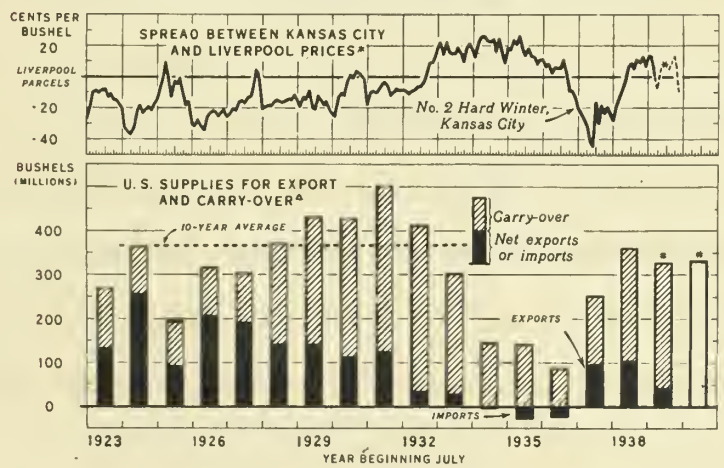


* AVERAGE BRITISH PARCELS DEFLATED BY STATIST INDEX NUMBERS (1910-14=100). PRICES SINCE SEPT. 2, 1939 COMPUTED ON BASIS OF PRICES IN EXPORTING COUNTRIES AND CONVOYED OCEAN FREIGHT RATES.

△ PRELIMINARY

U. S. DEPARTMENT OF AGRICULTURE NEG. 20691 BUREAU OF AGRICULTURAL ECONOMICS

WHEAT: SPREAD BETWEEN PRICES AT KANSAS CITY AND LIVERPOOL, AND U. S. SUPPLIES FOR EXPORT AND CARRY-OVER, 1923-40



* LIVERPOOL PRICES SINCE SEPT. 2, 1939, WHEN LIVERPOOL MARKET CLOSED, COMPUTED ON BASIS OF PRICES IN EXPORTING COUNTRIES AND CONVOYED OCEAN FREIGHT RATES.

△ CARRY-OVER PLUS PRODUCTION LESS DOMESTIC UTILIZATION

PRELIMINARY

U. S. DEPARTMENT OF AGRICULTURE NEG. 34440 BUREAU OF AGRICULTURAL ECONOMICS

WITH WORLD WHEAT SUPPLIES FOR THE YEAR 1940-41 LIKELY TO BE ONLY ABOUT 100 TO 200 MILLION BUSHELS LESS THAN THE RECORD SUPPLIES A YEAR EARLIER, WORLD PRICES MAY BE EXPECTED TO REMAIN AT LOW LEVELS.

THE PROSPECTIVE SUPPLY FOR EXPORT AND CARRY-OVER IN THE UNITED STATES IS BELOW THE 1924-33 AVERAGE. WITH THE CONTINUANCE OF THE EXPORT-AID PROGRAM AND THE LIKELIHOOD THAT LARGE QUANTITIES OF WHEAT WILL BE STORED, DOMESTIC WHEAT PRICES MAY BE EXPECTED TO CONTINUE WELL ABOVE WORLD LEVELS.

THE WHEAT SITUATION

Summary

A prospective United States wheat crop little larger than annual disappearance, the current movement of a large part of this crop into storage, and the announcement of continuance of the export-aid program, have tended to keep domestic wheat prices well above world levels. Although domestic wheat prices during the past month have continued to move downward toward a new crop basis, they are still above prices of a year ago. Prices in other surplus-producing countries are depressed by large world supplies and restricted world trade.

The domestic wheat supply for the 1940-41 season still seems likely to be about 1 billion bushels, about the same as for the marketing season ended June 30. The condition of the wheat crop on July 1 indicates a probable outturn of about 729 million bushels (about 1 million bushels more than indicated a month earlier), and available data as to the utilization and supplies of old wheat indicate a probable carry-over of about 280 million bushels. With domestic utilization of wheat in the new marketing season expected to approximate 675 million bushels, and with 3 million bushels required for possessions of the United States, the supply available for export and carry-over probably will be about 330 million bushels, or about the same as a year ago. Export prospects for 1940-41 are very uncertain. In 1939-40 they were about 46 million bushels.

World wheat supplies 1/ for the year beginning July 1, 1940 may be 100 to 200 million bushels smaller than a year earlier, when they totaled

1/ All references to world acreage, production, and stocks in this report exclude Soviet Russia and China except where noted.

about 5,460 million bushels - the largest supply on record. Prospective world wheat production in 1940-41, estimated this year largely on the basis of unofficial reports, may be from 350 to 450 million bushels less than a year ago, but this decrease is partly offset by an estimated increase in carry-over stocks on July 1, 1940 of about 250 million bushels.

Production in the Northern Hemisphere may be about 3,400 million bushels, or about 12 percent below that of last year. The indicated total for North America is about 1,170 million bushels, which is about 7 percent below that for 1939. The European total, excluding Soviet Russia, may be about 1,360 million bushels, or about 20 percent less than in 1939 and almost 25 percent below the record 1938 harvest. In the Southern Hemisphere, where seeding is nearing completion, the harvest may be between 25 and 75 million bushels larger than a year earlier. Production in Argentina is expected to be materially larger than the small crop of last year. On the other hand, conditions in Australia have been too dry and a decline in production may result.

Because of the indicated poor wheat crop in Europe, world trade in wheat probably would be well above that of any recent year if it were not for European military and political conditions. Exportable supplies in surplus-producing countries, estimated at about 1 billion bushels, are about double world trade in recent years. The blockade and governmental policies in surplus countries, however, may greatly restrict world wheat movement.

-- July 25, 1940

THE WORLD WHEAT SITUATION 2/

BACKGROUND.- Total world supplies of wheat increased sharply from 1924 to 1933, as a result of both increased acreage and

2/ All references to world acreage, production, and stocks in this report exclude Soviet Russia and China except where noted.

yields. From 1934 to 1936, world supplies declined, following successive years of small yields and increased world demand. Supplies increased slightly in 1937. With above-average yields on the large acreage, supplies in 1938 and 1939 were the largest on record.

World wheat prices declined in the period 1924-33 with the increase in world supplies. The sharp decline in prices after 1929 was caused largely by the general decline in industrial activity and commodity prices. From the spring of 1933 to the summer of 1937, world wheat prices moved upward, reflecting world-wide recovery in commodity price levels, currency depreciation, and reduced production. The world price for the 1937 crop remained practically unchanged from that of a year earlier. In 1938, world prices again declined sharply as a result of record world production and weakness in demand. Prices in 1939-40 averaged higher than a year earlier, influenced by an expected increased demand for wheat as a result of the war, and by poor crop prospects in Argentina and the United States.

World production indicated to be about 10 percent below 1939 crop

The 1940 world wheat production 2/ on the basis of preliminary unofficial forecasts, is indicated to be about 10 percent below that of 1939 and about 15 percent below the record 1938 crop. Table 1 gives estimates for different parts of the world. These unofficial estimates, which are necessarily based on fragmentary data, are given as a preliminary indication of expected production. The Northern Hemisphere total is indicated at about 3,400 million bushels, which is about 12 percent below that of last year.

The condition of the wheat crop in Canada declined 4 percent during June. On June 30 the condition was reported at 92 percent, compared with 102 percent on June 30, 1939. The greatest decline is reported for Saskatchewan, where it amounted to 5 percent. The decline in prospects was caused largely by a combination of high temperature and insufficient moisture, although damage from grasshoppers also contributed in some areas. During July the crops in the Prairie Provinces continued to make fair progress in spite of high temperatures. On the basis of weather and yield studies, 1940 production is tentatively placed at 425 million bushels.

Production in Europe, other than the Danube Basin and Soviet Russia is tentatively indicated at 1,060 million bushels. This is about 16 percent below the total estimate for these countries in 1939. Production in all Europe, excluding Soviet Russia now appears to be about 20 percent below that of last year. In western Europe prospects range from below average to

2/ All references to world acreage, production, and stocks in this report exclude Soviet Russia and China except where noted.

average. In Spain harvesting is now going on and prospects are for a fairly good crop - larger than in 1939 - though probably below domestic requirements. In Italy harvesting is also progressing actively; yields, while good, are expected to be below those of last year. The wheat harvests in Germany and the Scandinavian countries are expected to be generally below the large crops of the past 2 years. The outlook for the wheat crop in Belgium, the Netherlands, and parts of France is extremely unfavorable.

Table 1.- Wheat: Production, in specified countries, 1937-40

Country	1937	1938	1939	1940 1/
	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels
Northern Hemisphere				
North America:				
United States	875,676	931,702	754,971	729,000
Canada	180,210	360,010	489,623	425,000
Mexico	10,955	11,845	14,771	13,000
Total (3)	1,066,841	1,303,557	1,259,365	1,167,000
Europe:				
Europe, excl. Danube Basin and Soviet Russia (26)	1,178,000	1,393,000	1,263,000	1,060,000
Danube Basin (4)	361,000	466,000	453,000	300,000
Total (30)	1,539,000	1,859,000	1,716,000	1,360,000
North Africa (4)	119,000	121,000	151,000	125,000
Asia (6)	678,000	741,000	738,000	748,000
Total 43 countries	3,402,841	4,024,557	3,864,365	3,400,000
Estimated Northern Hemisphere total, excluding Soviet Russia and China 2/	3,406,000	4,029,000	3,869,000	3,403,000
Southern Hemisphere				
Argentina	184,801	336,201	119,453	240,000
Australia	187,256	155,369	210,110	150,000
Union of South Africa	10,157	17,093	15,310	14,000
Estimated world total, excluding Soviet Russia and China 3/	3,852,000	4,605,000	4,270,000	3,866,000

Compiled from official data.

1/ Data are, in most instances, unofficial forecasts and should be interpreted as preliminary indications only.

2/ Includes, besides countries listed, estimates for wheat-producing countries for which reports are not available.

Production in the Danubian countries is tentatively placed at 300 million bushels. If the crop turns out to be near this figure, it would mean a reduction of 34 percent from the large 1939 harvest. The estimate of 300 million includes Bessarabia and northern Bukovina - territory now ceded to Soviet Russia. This area normally produces about 20 percent of the Rumanian crop and this year has better prospects than any other part of the Danubian area.

Harvesting is active in some parts of Soviet Russia and is taking place under favorable circumstances. While official comment shows optimism, trade sources indicate only moderate prospects.

The latest Japanese official estimate for the 1940 wheat crop, excluding Hokkaido, places production at 61.5 million bushels. Some sources of information, however, indicate that it is considered doubtful if this year's crop will equal that of last year. The wheat acreage, excluding Hokkaido, was estimated at 13 percent above last year, but the yield per acre this season is not expected to be as large as in 1939. This season's wheat crop in China is now unofficially placed at 700 million bushels, which is below the average for the 1934-38 period, but above the 667 million bushels produced last year.

Wheat in the early seeded areas in Argentina has a good appearance. Heavy rains during June were unfavorable to the crop and cold and have restricted seeding activities in a number of districts. Dry weather is now desirable for its favorable development. In Australia, on the other hand, wheat is deteriorating over wide areas because of extreme dryness. Soaking rains are now urgently needed. The Argentine crop is tentatively placed at 240 million bushels and that for Australia at 150 million bushels.

World wheat carry-over July 1, 1940 about 240 million bushels larger than a year earlier

World wheat disappearance in 1939-40 is still tentatively placed at 4,025 million bushels, as was reported in the April issue of The Wheat Situation. In 1938-39 world disappearance, estimated at 4,052 million bushels, was the largest on record. With information from European countries on imports, stocks, and mill output almost entirely discontinued, any figure of total disappearance should be regarded as only an indication.

In the United States, domestic disappearance is estimated to have been about 40 million bushels less than a year earlier, largely because of reduced feeding. In Canada, Argentina, and Australia not much change from the previous year is indicated. In the Danube countries, French North Africa, the Near East, and British India, disappearance was probably larger than in 1938-39 because the quantity used usually varies with the quantity available, and supplies for the year were somewhat larger than in 1938-39.

On the basis of a disappearance of 4,025 million bushels, and a total supply of 5,457 million bushels, a carry-over on July 1, 1940 of about 1,430 million bushels is indicated, which is about 240 million bushels more than a year ago, and about 835 million bushels more than 2 years ago. The indicated carry-over figure for 1940 is roughly also the total of projected stocks figures by individual countries.

World trade in wheat in 1940-41 will be affected by the blockade and governmental policies

On the basis of the indicated poor wheat crop in Europe, were it not for European military and political conditions world trade in wheat probably

would be well above that of any recent year. (In 1936 world shipments were slightly over 600 million bushels and in the 10-year period (1929-38) they averaged about 550 million bushels.) The blockade and governmental policies in surplus countries, however, may greatly restrict world wheat movement in 1940-41.

The Canadian wheat supply remaining for export or carry-over in Canada and the United States on July 1, 1940 is estimated at 280 million bushels compared with 117 million bushels a year earlier (table 2). The supply for export or carry-over in Argentina on July 1 is estimated at 10 million bushels, compared with 165 million bushels a year earlier. With very small supplies, Argentina is practically out of the European market until after the next harvest in January. The last Argentine crop was small, but exports for the first half of 1940 have been maintained at high levels. The supply for export or carry-over in Australia on July 1 is placed at 135 million bushels, on the basis of official exports through February, and unofficial estimates for succeeding months. The estimate for July 1, 1939 for Australia was 49 million bushels. Australia is so far from Europe that high shipping costs and war-time transportation risks have greatly reduced the prospects for exports to Europe, even though supplies are large.

Table 2.- Estimated wheat surplus for export or carry-over in three exporting countries, United Kingdom port stocks, and stocks afloat, July 1, 1937-40 1/

Position	1937	1938	1939	1940
	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.
Canada				
In Canada	45	34	112	258
In the United States	5	1	5	22
Argentina	21	36	165	2/ 10
Australia	38	48	49	3/ 135
Total	109	119	331	425
United Kingdom port stocks	11	12	21	4/
Stocks afloat to:				
United Kingdom	12	13	18	4/
Continent	12	11	14	4/
Orders	10	12	13	4/
Total	45	48	66	
Grand total	154	167	397	

1/ Carry-over at the beginning of the year (Canada, July 31; Argentina, January 1; Australia, December 1 of the previous year) plus production minus domestic utilization for the year, minus monthly exports to date.
2/ On the basis of reports from trade sources this estimate is too small.
3/ Based on official exports through February, and unofficial estimates for succeeding months.
4/ Not available.

As during the current year, Canada and Argentina (after January 1, 1941) are expected to play important roles in world trade in 1940-41, and supplies in these 2 countries are expected to be large enough to supply all trade demands. With excess old crop supplies of about 280 million bushels on July 1, 1940 and a new crop estimated at about 430 million bushels, Canadian supplies total 710 million bushels. Domestic utilization in Canada may total about 130 million bushels and allowing for a minimum normal carry-over of about 50 million bushels, there would be about 530 million bushels available for export. On the basis of conditions to date and average conditions for the rest of the season, the new crop in Argentina has a chance of totaling about 240 million bushels, which would indicate exportable supplies of about 140 million bushels, after deducting about 100 million bushels for domestic requirements. On the basis of these indications, exportable supplies in these 2 countries would be more than sufficient to take care of probable world trade. Exportable supplies in the Danubian countries, French North Africa, Australia, and the United States are expected to be large enough to bring the total quantity available for export to about a billion bushels.

Prices at Winnipeg and Buenos Aires about at established minimum levels

For the week ended July 20, October futures at Winnipeg at 66.9 cents were 1/2 cent below the average for the week ended June 22 (table 3). October futures at Buenos Aires on July 20 at 77.1 cents were about 4 cents higher than for the week ended June 22. Current prices at Winnipeg are at the minimum established prices and those at Buenos Aires are slightly above. Minimum prices at Winnipeg were established on May 18 and at Buenos Aires on May 31.

Table 3.- Average closing price of September wheat futures, specified markets and dates, 1939 and 1940

Period	Winnipeg 1/		Liverpool 1/		Buenos Aires 2/		Chicago		Kansas City		Minneapolis	
	1939	1940	1939	1940	1939	1940	1939	1940	1939	1940	1939	1940
	Ct.	Ct.	Ct.	Ct.	Ct.	Ct.	Ct.	Ct.	Ct.	Ct.	Ct.	Ct.
Month												
Apr.	62.8	84.7	63.3	--	---	---	69.0	106.9	64.7	102.0	71.4	103.4
May	66.6	76.0	64.6	--	---	---	74.8	93.6	70.8	89.1	78.3	91.9
June	61.8	68.5	60.4	--	---	---	73.5	79.8	69.0	74.8	77.2	78.0
Week ended:												
June 8	62.8	70.2	61.6	--	---	---	75.6	81.1	71.4	76.4	78.8	79.9
15	61.8	69.2	60.2	--	59.8	70.0	73.5	81.3	68.8	76.8	77.1	79.8
22	60.2	67.4	58.9	--	59.8	70.6	70.7	78.6	66.1	73.6	74.5	76.5
29	60.1	66.9	59.0	--	59.6	73.0	71.8	77.6	67.0	71.8	75.8	75.5
July 6	58.8	66.9	58.1	--	59.5	75.0	69.2	77.0	64.7	70.9	73.0	76.8
13	54.6	66.9	56.0	--	59.5	74.1	66.7	74.8	62.2	69.2	70.6	74.4
20	53.3	66.9	53.2	--	59.5	74.9	65.6	74.4	60.8	68.7	69.0	73.4
High 3/	67.3	85.4	65.2	--	59.8	75.0	77.8	109.4	73.7	104.6	81.6	105.5
Low 3/	53.3	66.9	53.2	--	59.5	70.0	65.6	74.4	60.8	68.7	69.0	73.4

1/ October futures. Conversions at noon buying rate of exchange 1939; 1940 figures at official rate which is 90.909 cents. Any United States buyer of Canadian grain would be required to make settlement in terms of United States dollars through an agent of the Canadian Foreign Exchange Control Board at the official rate.

2/ August futures.

3/ April 6-July 20, 1940 and corresponding dates, 1939.

THE DOMESTIC WHEAT SITUATION

BACKGROUND.- Domestic wheat prices from the spring of 1933 to the spring of 1937 were unusually high in relation to world prices, as the result of small crops in the United States. During this same period, prices in other countries also moved upward, reflecting a world-wide recovery in commodity price levels, currency depreciation, and reduced production. The average prices received by United States producers for the 1931 and 1932 crops were 39 and 38 cents, respectively, compared with average prices for the four crops, 1933 to 1936, of 74, 85, 83, and 103 cents per bushel, respectively.

In 1937 United States production was large and prices to growers declined to an average of 96.0 cents. In 1938, with domestic production again large, with a record world crop and with lower commodity prices, prices received by producers declined to an average of 55.4 3/ cents and would have averaged still lower had it not been for the loan and export-subsidy programs which held domestic prices above export parity.

Prices received by growers for wheat during the year beginning July 1939 are tentatively estimated at 70.2 3/ cents. This also is relatively high compared with the usual relationship to prices in other countries, as a result of only a moderately large carry-over, reduced acreage, poor prospects for 1940 yields, and the holding of wheat in expectation of higher prices.

Prices advanced sharply in September 1939, following the outbreak of the European war, and again in December, influenced by war developments and by poor crop prospects in Argentina and the United States. In the middle of May 1940, following the turn of events in Europe, selling became heavy and most of the gains were lost.

Exports from the United States have declined with those from other surplus wheat-producing countries from about 1926 to 1933. During the period 1934-38, small crops in the United States were followed by net imports. The 1937 wheat crop was greatly in excess of domestic needs, and 100 million bushels of wheat and flour in terms of wheat were exported under conditions of reduced competition resulting from small crops in Canada and Argentina. In 1938 another large crop was produced, but exporting conditions were the most difficult since 1931 because of large crops in other countries, and exports of 107 million bushels were made possible only by an export-subsidy program. With a 1939 crop only moderately large and prospects of a poor crop in 1940, exports in 1939-40 totaled only about 46 million bushels.

3/ Includes loan wheat at average loan values.

Estimate of wheat supply in the United States about same as a month ago and also year ago

The domestic wheat supply for the 1940-41 season now seems likely to be about 1 billion bushels, about the same as for the marketing season ended June 30. The condition of the wheat crop on July 1 has been interpreted to indicate a probable outturn of about 729 million bushels (about 1 million bushels more than indicated a month ago), and available data as to utilization and supplies of old wheat indicate a probable carry-over of about 280 million bushels. With domestic utilization of wheat in the new marketing season expected to approximate 675 million bushels, and with 3 million bushels required for possessions of the United States, the supply available for export and carry-over probably will be about 330 million bushels, or about the same as a year ago. The official export figures are not yet available for June, but it appears that for the year they will total about 46 million bushels. Export prospects in 1940-41 are very uncertain. However, if they total about the same as in 1939-40 it follows that the carry-over July 1, 1941 will also be about the same as on July 1, 1940. 4/

Table 4.- Wheat supply and distribution, by classes, in continental United States, estimated for 1939-40 and projected for 1940-41

Item	Hard red winter	Soft red winter	Hard red spring	Durum	White	Total
	Million bushels	Million bushels	Million bushels	Million bushels	Million bushels	Million bushels
A. Year beginning July 1, 1939						
Carry-over July 1, 1939 (old wheat)	114	30	73	18	19	1/ 254
Production in 1939	307	203	130	35	80	755
Total supply	421	233	203	53	99	1,009
Exports and shipments	23	2	5	--	19	49
Domestic disappearance	246	208	130	32	64	680
B. Year beginning July 1, 1940						
Carry-over July 1, 1940 (old wheat)	152	23	68	21	16	280
Production in 1940	267	203	136	36	87	729
Total supply	419	226	204	57	103	1,009
Domestic disappearance	245	203	130	32	65	675
Available for shipments, exports, and carry-over July 1, 1941	174	23	74	25	38	334
Shipments	1	--	--	--	2	3
Available for exports and carry-over July 1, 1941	173	23	74	25	36	331
C. July stocks, comparisons						
Average, 1929-33 3/	161	32	79	24	21	317
Average, 1934-38 3/	69	29	37	6	19	160
Smallest total in recent years (1937)	37	15	18	3	10	83
Largest total (1933) 3/	201	31	98	16	32	378

1/ Includes crop insurance reserve of 6 million bushels.
2/ Includes crop insurance reserve of about 12 million bushels.
3/ Contains some new wheat prior to 1937, perhaps 15-20 million bushels on the average.
4/ See special article page 14.

The estimated supply and distribution by classes for 1939-40 are shown in table 4, section A, projected figures for 1940-41 in section B, and carry-over stocks for comparison in section C. The July 1 crop report indicated a decrease in spring wheat production of 34 million bushels and an increase in winter wheat production of 35 million bushels, compared with the June indications. While this changed the total production figure by only 1 million bushels, it changed the estimated production, disappearance and supply available for exports and carry-over by classes significantly.

Production of winter wheat in 1940 was indicated at 523,990,000 bushels, on the basis of the July report of condition and probable yield. This is 7 percent lower than last year's crop of 563,431,000 bushels, and about 8.5 percent below the 10-year (1929-38) average production of 571,067,000 bushels. This prospective production is being harvested on an estimated 34,922,000 acres, nearly 11 percent less than the average harvested acreage, but with an expected yield 5 percent above average.

Conditions were good for plant growth over most of the soft winter wheat territory east of the Mississippi River, but some rust and scab developed and reduced yield prospects in the northern part of this section. Indicated yields in most of the States east of the River are better than last year, however, and above average. Yields at harvest also are above the yields expected on the basis of June 1 conditions over most of these States, excepting in Delaware, Maryland, and Ohio, where scab damage was reported, and in Indiana and parts of Illinois where rust had already caused serious damage in some localities and where it was expected further damage might occur to late maturing wheat. In the Southern Great Plains States, wheat harvesting began unevenly and late, which increased the threat of rust. On the early harvested acreage, yields and quality were generally good. In the area in Nebraska, Kansas, and Oklahoma where the final outcome of the crop had been the most uncertain, continued improvement in the moisture situation and timely occurrence of rains brought an increase in prospective production. In addition to somewhat higher yields per acre, the acreage for harvest was increased. Much of this additional acreage earlier seemed destined to fail, but it improved sufficiently during May and June to justify harvesting. A shortage of precipitation and water reserves during June, however, lowered yields in the Northern Plains section, and in the Mountain and West Coast States, excepting Nevada.

Winter wheat yield per harvested acre was placed at 15.0 bushels, compared with 14.9 bushels last year, and the 10-year average of 14.3 bushels. The July 1 harvested acreage is 34,922,000 acres, compared with 37,802,000 acres harvested in 1939, and the 10-year average of 39,453,000 acres.

By late July winter wheat harvesting was practically completed northward to southern Iowa and threshing progressed favorably.

All spring wheat production in 1940 was indicated at 204,654,000 bushels on the basis of July 1 condition. This compares with 191,540,000 bushels raised on a smaller acreage in 1939, and the 10-year (1929-38) average of 183,619,000 bushels. Yields per acre on July 1 were expected to exceed average in all the important spring wheat producing States.

Rainy, cold spring weather delayed seeding in much of the mid-west area, but apparently did not keep farmers from seeding up to their March intentions. In parts of the Dakotas the straw was short and heads had been damaged by drought and excessive heat during June. Grasshoppers were late in hatching compared with the development of wheat crop, so that little damage from that source is expected. The large proportion of the crop planted of rust-resistant varieties has reduced the probability of widespread damage from rust this year.

The seeded acreage of all spring wheat is estimated at 19,374,000 acres, 10.5 percent more than in 1939. July 1 conditions indicate an abandonment of 8.3 percent, leaving 17,758,000 acres for harvest. This is about 12 percent more than was harvested last year and exceeds the 10-year average of 17,416,000 harvested acres by nearly 2 percent.

Production of durum wheat in 1940 was estimated at 34,954,000 bushels compared with 34,360,000 bushels in 1939, and the 10-year average of 29,619,000 bushels. Yields were forecast below those of last year but well above average, particularly in North Dakota, which has about four-fifths of the acreage and prospective production. The seeded acreage in 1940 was 3,564,000 acres, 11 percent above that of 1939, but 3 percent below the 10-year average. A loss of 6.6 percent of the seeded acreage, as indicated by July 1 conditions, would leave 3,330,000 acres for harvest, which is 9 percent more than was harvested in 1939 and 10 percent above the 10-year harvested average of 3,035,000 acres.

Other spring wheat production will reach 169,700,000 bushels, on the basis of July 1 indications, compared with 157,180,000 bushels in 1939 and the 10-year average of 154,000,000 bushels. Indicated yields per harvested acre, while below those of 1939 in Nebraska, North Dakota, and most Western States, still exceed the 10-year average in most important spring wheat areas.

An acreage of 15,810,000 acres was sown to spring wheat other than durum or 10.5 percent more than in 1939, and July conditions indicate an abandonment of about 8.7 percent, which would leave 14,428,000 acres for harvest. This is about 12.5 percent above the 1939 harvested acreage, and approximates very closely the 10-year harvested average of 14,381,000 acres.

In late July conditions favored harvest in eastern South Dakota, with some early wheat being cut in North Dakota. High temperatures accompanied by little or no rain is causing considerable damage in South Dakota. Considerable drought damage is also apparent to spring wheat in the Pacific Northwest.

Carry-over stocks on July 1, 1940 are still tentatively estimated at 280 million bushels 5/, on the basis of available data as to the utilization and supplies of old wheat. This estimate includes about 12 million bushels held for crop insurance.

Stocks of old wheat on farms July 1 were estimated at 85.5 million bushels and in cities at 84.2 million bushels, making a total of 169.7

5/ The Wheat Situation, June 26, 1940.

million bushels for these two items, which compares with 154.5 million bushels for the same items a year earlier. The estimate of total carry-over stocks includes, in addition to these two items, estimates of stocks in country elevators and mills, (available July 25) and estimates of stocks in merchant mills and elevators, (available in early August). These will be published in the August issue of "The Wheat Situation."

Domestic wheat prices decline toward new crop basis

During the past month domestic wheat prices have continued to decline toward the new crop basis, but they are still above the levels of a year ago. For the week ended July 20, No. 2 Hard Winter at Kansas City at 68.1 cents was 8.3 cents lower than for the week ended June 22, and No. 1 Northern Spring at Minneapolis at 78.5 cents was 2.3 cents lower than for the week ended June 22 (table 5). In the Pacific Northwest, however, where it has been dry, soft wheat in Portland at 74.1 cents averaged about 2 cents higher for the week ended July 20 than for that ended June 22.

While prices have declined during the past month, they are 3 to 5 cents above the levels of a year ago. On the other hand, they are generally below loan values. In Kansas City and Minneapolis they are about 9 cents below such values, but in Portland they are about 1 cent above. With market prices below loan values, a large proportion of the new crop is being placed in storage, a practice which in the past 2 years has had a strengthening price effect.

Table 5.- Weighted average cash price of wheat, specified markets and dates, 1939 and 1940

Month or date	All classes: and grades: six markets		No. 2 Hard Winter: Kansas City		No. 1 Dk. N. Spring: Minneapolis		No. 2 Hard Amber Durum: Minneapolis		No. 2 Red Winter: St. Louis		Soft White: Portland 1/	
	1939	1940	1939	1940	1939	1940	1939	1940	1939	1940	1939	1940
	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents
Crop year ended:												
June 30	69.9	86.0	69.5	74.1	79.1	96.7	72.5	92.2	69.6	74.7	66.5	79.5
Month-:												
Apr.	72.4	105.6	69.6	105.7	77.8	108.2	74.3	99.1	76.4	111.2	69.8	84.3
May	80.2	96.8	75.7	94.7	85.6	100.7	79.1	88.6	82.7	104.3	72.3	78.1
June	74.5	78.3	70.9	76.3	84.4	82.3	76.4	73.9	73.4	87.4	73.1	72.4
Week ended:												
June 8:	79.8	80.7	75.5	80.1	85.1	84.5	80.2	74.1	81.2	88.4	73.2	72.2
15:	76.8	79.6	72.4	79.5	83.7	83.8	75.8	74.5	77.0	88.5	73.1	73.3
22:	71.8	77.8	69.2	76.4	82.2	81.3	72.7	72.0	75.1	---	72.2	72.2
29:	70.6	76.3	70.4	74.6	83.5	81.0	74.6	74.0	71.9	82.0	73.5	72.2
July 6:	69.0	73.8	68.8	72.5	80.9	80.5	72.3	79.2	70.4	77.1	71.3	72.8
13:	66.7	72.2	65.2	70.3	80.7	80.4	69.3	79.8	68.3	75.8	70.6	72.9
20:	67.0	71.3	64.9	68.1	75.2	78.5	68.3	76.4	67.7	75.2	69.4	74.1
High 2/:	83.9	107.5	79.0	108.3	89.0	110.3	82.0	100.9	85.4	112.7	74.0	85.3
Low 2/:	66.7	71.3	64.9	68.1	75.2	78.5	68.3	76.4	67.7	75.2	67.6	71.9

1/ Weekly average of daily cash quotations, basis No. 1 sacked. Seattle series discontinued June 1940. 2/ April 6 - July 20, 1940, and corresponding dates, 1939.

Wheat prices in the United States in 1940-41 are expected to continue above levels at which wheat could be freely exported. The prospective supply available for export and carry-over is not excessive. Moreover, it is expected that large quantities will be held off the market, and a continuation of the export subsidy program has been announced for the new year. 6/

The chart on page 1 shows that since September 1938, United States prices have been relatively high compared with prices at Liverpool. In 1937-38 No. 2 Hard Winter at Kansas City averaged 26.5 cents below prices of parcels at Liverpool, and over the 6 years, 1926-27 to 1931-32, they averaged 15 cents below prices at Liverpool. From October 1938 to June 1939 No. 2 Hard Winter at Kansas City averaged 5.3 cents above prices of parcels at Liverpool. Prices at Liverpool for the 1939-40 year are not available, because British markets have been closed since September 2, 1939. However, using values computed on the basis of prices in exporting countries and convoyed ocean freight, it is estimated that No. 2 Hard Winter at Kansas City would have averaged about 4 cents above the price of wheat parcels in Liverpool.

Prices of hard winter wheat at Gulf ports currently are about 21 cents above export parity, and of white wheat at Pacific ports about 30 cents above. This margin for the past 12 weeks has been 25 cents for the Gulf and 29 cents for the Pacific Coast. Prices of domestic spring wheat at Buffalo are now about 28 cents lower than approximately the same quality of Canadian wheat, c.i.f., duty paid, at Buffalo. This margin for the past 12 weeks has been 14 cents.

COMPARATIVELY LARGE UNITED STATES WHEAT CARRY-OVERS JUSTIFIED

With current carry-over stocks considerably larger than in the 20's, the question naturally arises as to how much larger such stocks should be under present changed conditions of relatively small acreages and large variations in yields per seeded acre. Do present conditions justify maintaining carry-over stocks of wheat in the United States considerably larger than those which prevailed in the 20's?

During the past 20 years yields per seeded acre of all wheat have fluctuated between 15.1 bushels in 1924 and 8.1 bushels in 1933, with an average of 11.7 bushels. Until recent years the production of wheat in the United States was considerably in excess of domestic needs and carry-over stocks of only about 100 million bushels were considered necessary. In the last 2 years, however, the acreage of wheat has been reduced, so that it has

6/ Continuation into the 1940-41 fiscal year of the wheat and wheat flour export programs was announced July 2, 1940. Payments will continue to be made in connection with exports of wheat from the Pacific Northwest to China, Hong Kong, Dairen, the Philippine Islands and Europe; and for exports of wheat flour from that area to China, Hong Kong, Dairen and the Philippine Islands. On July 16, the flour export program was extended to include provision for payments in connection with exports of flour from all parts of the continental United States to the Americas. As of June 30, contracts for export under the 1939-40 programs amounted to 35.1 million bushels, of which 16.5 million bushels represented wheat sold for export in the form of flour.

become necessary to maintain larger carry-over stocks to offset possible deficiencies resulting from yields much below average.

On the basis of current seeded acreages of about 64 million acres, a yield per seeded acre as low as 8.1 bushels, as in 1933, would result in a crop of only about 520 million bushels, 160 million bushels less than our current domestic and territorial disappearance of about 680 million bushels. To safely meet such a low-yield year, and have a required minimum of 100 million bushels at the close of the season, it would be necessary to have a carry-over of about 260 million bushels at the beginning of the year. This, however, would take care of only 1 year of unusually low yields.

Following the 8.1 bushel yield in 1933, the United States had 3 more years of exceptionally small yields. The yield per seeded acre in 1934 was 8.3 bushels, in 1935 it was 9.1 bushels, and in 1936 it was 8.5 bushels, compared with the 20-year average of 11.7 bushels. Under the circumstances a carry-over in excess of the 260 million bushels obviously would have been justified.

In the years in which wheat supplies have been short, hard wheats for the making of flour used in commercial baking have been imported. In the United States our principal types of such wheats are hard red winter and hard red spring. Hard red winter and hard red spring wheats are readily interchangeable in the making of flour for commercial baking. The other important classes of wheat raised in the United States are soft red winter, white, and durum. The soft red winter and much of the white wheat is used principally for pastry, pies, crackers, biscuits, etc., and the durum for macaroni and related products. The soft red and white wheats are used in limited quantities with the hard wheats, but are not readily interchangeable. Durum and the hard bread wheats are also not very interchangeable. There have never been shortages of soft red and white wheats, and in view of limited export outlets no shortage is expected in the case of durum.

The situation is quite different in the case of the hard red winter and hard red spring wheats. We have been using about 350 million bushels of both of these classes combined, and it is desirable to have this quantity available, in the carry-over and crop, for the current year's consumption, in addition to a carry-over at the close of the season of at least 60 million bushels of both classes combined, making a total of 410 million bushels.

Under the present 64 million seeded acres of all wheat, about 31.9 million is hard red winter and 14.1 million is hard red spring. With average yields these acreages will produce about 300 million bushels of hard red winter and 130 million bushels of hard red spring wheat. However, if hard red winter wheat yields are as low as the 5.5 bushels per seeded acre as in 1933 only 175 million bushels of hard red winter wheat would be produced; also if spring wheat yields per seeded acre were as low as the 2.5 bushels of 1936, only 35 million bushels would be produced. This total of 210 million bushels would be about 200 million bushels short of domestic needs of 410 million bushels. In other words, regardless of the size of the total carry-over of all wheat, a carry-over of about 200 million bushels of hard red winter and hard red spring combined would be necessary to take care of a year of record low yields on current acreages.

In the light of these considerations, the wheat carry-overs on July 1, 1940 - tentatively estimated at about 220 million bushels for hard red winter and hard red spring wheat, and at about 280 million bushels for all wheat - do not seem large.

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Table 6.- Movement of wheat, including flour, from principal exporting countries, 1936-37 to 1940-41

Country	Exports as given by official sources: Total 1936-37	Total 1937-38	Total 1938-39	July 1 to date shown 1937-38	July 1 to date shown 1938-39	July 1 to date shown 1939-40	Date
	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	
United States 1/	21,584	107,194	115,784	98,184	108,987	52,439	May 31
Canada	213,028	94,546	159,885	94,546	159,885	210,212	June 30
Argentina	162,977	69,670	116,116	62,137	91,861	160,350	May 31
Australia	97,712	123,453	96,685	60,875	58,949	41,711	Feb. 29
Soviet Union	4,479	43,354	2/38,000				
Hungary	27,428	9,368	27,650	6,994	18,442	30,219	Feb. 29
Yugoslavia	17,954	5,012	5,346	4,536	4,079	6,660	Dec. 31
Rumania	36,258	32,210	43,940	28,902	31,247	27,037	Mar. 31
Bulgaria	7,275	8,489	2,633	5,632	179	4,749	Jan. 31
British India	16,571	19,677	10,097	12,762	8,900	3/2,368	Jan. 31
Total	605,266	512,973	616,136				

	Shipments as given by trade sources: Total 1937-38	Total 1938-39	Week ended, 1940 July 6	July 13	July 20	July 1 - July 20 1939-40	July 1 - July 20 1940-41
	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels
North America 4/	184,720	245,296	3,185	4,194	2,683	12,264	10,062
Argentina	66,928	114,272	3,409	2,726	2,771	10,308	8,906
Australia	127,520	102,116	5/	5/	5/	4,436	5/
Soviet Union	42,248	39,824	0	0	0	1,088	0
Danube & Bulgaria 6/	37,232	52,848	232	216	64	2,600	512
British India	7/ 19,677	7/10,097	0	0	0	0	0
Total above	478,325	564,453				30,696	29,542
Total European shipments 4/	397,592	450,784					
Total ex-European shipments 4/	99,400	146,760					

1/ Includes flour milled in bond from foreign wheat.
2/ From official sources, through December, supplemented by unofficial estimates for the following 6 months.
3/ Excludes land trade for January.
4/ From Broomhall's Corn Trade News.
5/ Official exports reported through February 1940 only. Not available subsequently.
6/ Black Sea shipments only.
7/ Official.

Table 7.- Shipments of wheat, including flour, from principal exporting countries, specified dates, 1938-39 and 1939-40

Period	Argentina		Australia		Danube		North America	
	1938-39	1939-40	1938-39	1939-40	1938-39	1939-40	1938-39	1939-40
	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels	1,000 bushels
July-May	92,536	158,368	94,208	1/ 41,684	46,336	37,136	226,848	197,178
Week ended								
June 8	4,868	3,267	3,204	2/	1,136	1,016	4,888	4,904
15	7,804	2,972	1,340	2/	1,896	992	5,232	2,968
22	5,364	3,992	1,528	2/	1,320	456	4,440	2,296
29	3,700	5,180	1,836	2/	2,160	16	3,888	2,523
July 6	4,372	3,409	1,468	2/	624	232	5,368	3,185
13	3,660	2,726	1,860	2/	1,240	216	2,840	4,194
20	2,276	2,771	1,108	2/	736	64	4,056	2,683

Compiled from Broomhall's Corn Trade News.

1/ Official exports, July-February, compared with 58,949,000 bushels in the same period of 1938-39.

2/ Not available.

THE RYE SITUATION

A rye crop of 36.8 million bushels is in prospect this year, compared with 39.2 million bushels last year and the 10-year (1928-38) average production of 38.1 million bushels. The current estimate is about 2 million bushels smaller than that of June. Although yield prospects declined during June in North Dakota, which has the largest rye acreage of any State, and in several other States to the west, the indicated yield for the entire country is still half a bushel above the 10-year average. The indicated yield of 11.9 bushels per acre this year compares with 10.3 bushels last year and the 10-year average of 11.4 bushels.

The acreage for harvest in 1940 is 3.1 million acres, which is 19 percent less than last year and 5 percent below the 10-year average. All of the States with large acreages show declines from a year ago. Both the acreage and production of rye this year are the lowest since 1936.

The United States stocks of rye at the beginning of the 1940-41 marketing year are estimated at about 21 million bushels. A year ago the carry-over was 23 million bushels. With a crop indicated at about 37 million bushels, the total supply of rye for the 1940-41 season will amount to around 58 million bushels, as compared with 62 million bushels a year earlier, and 61 million bushels, the 1935-39 average. The apparent disappearance of rye in 1939-40 was about 41 million bushels, which was about the same as a year earlier and about 3 million bushels less than the 1935-39 average. During 1935-39, of the average total disappearance of 44 million bushels, it is estimated that 9 million bushels were used for food, 9 million bushels for distilled spirits, 10 million bushels for seed and 16 million bushels for feed.

Table 8.- Rye: Supply and distribution, United States, 1935-39

Year beginning July	Supply						Distribution		
	Stocks			Production	Imports	Total supply	Exports	Stocks	Apparent disappearance
	Commercial July 1	Farm June 1	Total						
	1,000 bu.	1,000 bu.	1,000 bu.	1,000 bu.	1,000 bu.	1,000 bu.	1,000 bu.	1,000 bu.	1,000 bu.
1935	8,560	2,723	11,283	58,597	2,266	72,146	9	22,299	49,838
1936	6,379	15,920	22,299	25,319	3,943	51,561	248	5,886	45,427
1937	1,406	4,480	5,886	49,830	1/	55,716	6,578	9,699	39,439
1938	1,000	8,699	9,699	55,564	1/	65,263	784	23,196	41,283
1939	7,384	15,812	23,196	39,249	1/	62,445	2/ 735	20,774	40,936
1940	9,506	11,268	20,774	36,848		57,622			

1/ Less than 500 bushels.
2/ Exports July 1, 1939-May 31, 1940.

WHERE TO FIND STATISTICS ON THE WHEAT SITUATION NOT INCLUDED IN THIS ISSUE: 1/

	Page	Issue
THE WORLD WHEAT SITUATION		
Supply and distribution		
1922-38	18	Feb. 1940 WS-40
Averages 1924-28, 1928-37, annual 1914, 1937	6	Sept. 1939 WS-35
Acreage and production		
Production in specified countries, 1936-38	5	Jan. 1940 WS-39
Production in specified countries, 1939 (text)	13	Mar. 1940 WS-41
Winter wheat acreage sown in specific countries	5	May 1940 WS-43
Stocks, July 1		
1938-39	4	Oct. 1939 WS-36
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Major exporting countries and afloat, 1922-39	8	Aug. 1939 WS-34
International trade		
International trade in wheat including flour, 1909-38	21	Feb. 1940 WS-40
International trade in wheat flour, 1909-38	25	Jan. 1940 WS-39
World shipments and to Europe and non-Europe, averages 1910-14, 1930-34, and annual	7	Sept. 1939 WS-35
THE DOMESTIC WHEAT SITUATION		
Supply and distribution		
All wheat, 1923-38	14	Feb. 1940 WS-40
All wheat, averages 1910-14, 1924-28, 1928-37, annual, 1913-16, 1937	11	Sept. 1939 WS-35
Classes, average 1929-33, annual 1937-38	15	Feb. 1940 WS-40
Production		
Classes, 1919-39	17	Jan. 1940 WS-39
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July 1, 1923-39	14	Feb. 1940 WS-40
January 1, 1936-40	8	Feb. 1940 WS-40
Exports and imports		
Exports of wheat including flour to specified countries, 1909-38	21	Feb. 1940 WS-40
Exports of wheat to specified countries, semi-annually beginning July 1936	19	Feb. 1940 WS-40
Exports of wheat flour to specified countries, semi-annually, beginning July 1936	20	Feb. 1940 WS-40
Imports into the United States, 1923-38	27	Aug. 1939 WS-34
Price and income		
Sales, price per bushel, and cash income, 1910-39	13	Feb. 1940 WS-40
Average price received by farmers in the United States, 1908-39	17	Mar. 1940 WS-41

1/ Selected tables used most frequently.

STATISTICS ON THE RYE SITUATION IN "THE WHEAT SITUATION" FEBRUARY 26, 1940